USEPA REGION 2 EQUIPMENT LOAN PROGRAM FOR CITIZEN SCIENCE WATER MONITORING

I. PURPOSE OF THE EPA EQUIPMENT LOAN PROGRAM FOR CITIZEN SCIENCE WATER MONITORING

The U.S. Environmental Protection Agency (EPA) has identified improving water quality as one of its highest priorities. The agency recognizes the value of monitoring data in guiding EPA, states and tribes in efforts to improve the health of the Nation's waters. There are waters, however, that states, tribes and EPA are not able to monitor at all or only on a very limited basis. In Region 2, volunteer water monitoring groups have played a valuable role in supplementing available monitoring data to our state regulatory agencies for over twenty years.

Recently, the focus in Region 2 has been on citizen scientists/community groups who have long collected data to better understand their local environment and address issues of concern to them. These projects conducted by volunteers with or without the assistance of government or academia, have been remarkably successful in expanding scientific knowledge, raising people's awareness about their environment and leveraging change over the past decade.

With this equipment loan program, EPA Region 2 will continue to support the work of the volunteer water monitoring organizations to meet the goal of expanding the number waters which are monitored, and welcome the new citizen scientists/community groups to participate in water quality monitoring studies within their communities.

In 2015, priority will be given to groups monitoring urban waters and/or waters in Environmental Justice areas, including Indian Nations. The ultimate goal of the citizen science equipment loan program is provide the tools and a framework to enable citizens to take an active role in their community and watershed by providing quality data to enhance environmental stewardship, create healthy, sustainable communities and to collaborate with government at all levels in protecting the environment. The equipment loan program will allow citizen scientists to have access to uniform monitoring equipment and methodologies to collect data that can have a meaningful impact in their communities.

II. EQUIPMENT AVAILABLE FOR LOAN

This loan program is restricted to equipment only, and does not include expendable supplies (e.g. gloves, calibration standards, disposable pipettes, etc.). EPA cannot loan computers or cameras.

The equipment loaned in 2015 will be limited to water quality meters, equipment to run laboratory bacterial tests, GPS units, and turbidity tubes. The available list of equipment may be expanded in subsequent years to allow citizen scientists/community groups to access to benthic macroinvertebrate collection equipment; air monitoring; and other types of water

quality monitoring. There will be 4 sets of equipment to loan this year. One set of equipment will be available for use in Puerto Rico/Virgin Islands and three others for New York and New Jersey groups.

III. ELIGIBILITY OF VOLUNTEER MONITORING GROUPS

The equipment loan program is open to all citizen scientists/community groups in EPA Region 2 (New York, New Jersey, Puerto Rico, and the US Virgin Islands) and tribal nations throughout Region 2, including those coordinated by states, municipalities, universities, and other organizations. The equipment loan program is open to groups with a wide spectrum of experience levels – those that are just getting started as well as those with extensive experience.

As part of the loan program, selected groups will need to have a current Quality Assurance Program or Project Plan (QAPP). A QAPP is required for any project that uses or collects environmental information. If a group is just getting started in monitoring (water and/or air), the QAPP will need to be in place before the loan of the equipment.

EPA Region 2 is developing a Citizen Science Toolbox for both water and air monitoring. The Toolbox will provide water and air monitoring sampling equipment, methodologies, quality assurance guidance and documentation, and training opportunities for citizen scientist/community groups to use for their projects and to assist them in generating credible data.

One such tool currently available for use is the U.S. EPA Region 2 Guidance for the Development of a QAPP for Citizen Science Projects. The QAPP uses a template format and includes a citizen science project example. The new guidance complies with EPA Quality Assurance (QA) requirements, but streamlines existing guidance for ease of preparation and use. The Guidance can be found at the following EPA Region 2 website:

http://www.epa.gov/region2/citizenscience/pdf/citsci air attach b form.pdf

The goals of data use must include a local application <u>and</u> sharing with at least one state or tribal regulatory agency responsible for assessing water quality conditions and reporting to EPA. Groups collecting data only for educational purposes will be considered but will be assigned a lower priority to groups listed in the first part of this section.

IV. SELECTION PROCESS

Organizations that are eligible include:

- Organizations that currently provide monitoring data to a state or tribal agency; are seeking to upgrade the type of methods used, <u>and</u> expand the number or types of monitoring sites.
- Sites within an EJ Communities and Tribal Nations will receive priority under the equipment loan program.

Organizations just getting started with monitoring who need equipment. Evidence
of a commitment to undertake monitoring with a goal of producing data for longterm use, and meeting QA and data use requirements is necessary. New
organizations will be given priority over prior participants in the loan program.

Minimum criteria for ranking applications include the following:

 Complete application: Applications with incomplete or missing information may not be considered. Make sure all required information is provided. Applications will be considered as they are received, with no follow-up for missing information.

V. CONDITIONS OF EQUIPMENT LOAN AGREEMENT

- a. Equipment can only be loaned on a short term basis (April December of each calendar year).
- b. Applicant agrees to maintain equipment in good working condition.
- c. Equipment will be labeled as belonging to EPA and will remain EPA equipment for the duration of the loan.
- d. The applicant agrees to notify EPA upon loss or damage to the equipment. Damaged equipment may be repaired by EPA or may need to be returned to EPA without replacement, depending upon circumstances.
- e. A loan agreement will be signed by the responsible leader of the organization.
- f. Each applicant agrees to provide an annual report detailing the objectives and results and impacts of their study. Partnering with a state agency and providing data that can be entered into EPA's national water quality database is encouraged.

VI. APPLICATION PROCEDURE & SCHEDULE

An application form is attached to this announcement. Applications should be limited to <u>three</u> pages, plus a copy of a site map, if available.

Once applications are received, an Equipment Loan Application Review Committee will review and make recommendations on selections.

Applications will be accepted through close of business February 28, 2015, with selections to be announced by March 31st, 2015. A signed copy of the application and QAPP can be submitted through email (preferred) or in hard copy to:

Patricia Sheridan, USEPA Region 2, 2890 Woodbridge Ave, Edison, NJ 08837 Email: Sheridan.patricia@epa.gov

USEPA REGION 2 EQUIPMENT LOAN PROGRAM APPLICATION



2890 Woodbridge Avenue Edison, NJ 08837 Patricia Sheridan, Citizen Science Coordinator, <u>sheridan.patricia@epa.gov</u>

1. ORGANIZATIONAL INFORMATION										
Name of Organization: Click h	ere to enter text	t.								
Street Address: Click here to	enter text.	Cit	y: Click here	to enter t	ext.	State text.	: Click here to ent	er	Zip: Click here to enter text.	
Name of Contact: Click here to enter text.								•		
Phone Number: Click here to enter text.								xt.		
Type of Organization (educational; nonprofit; government; NGO; etc.): Click here to enter text.										
Brief Description of Organization INCLUDING: Goals, History, purpose, and any partners or collaborators: Click here to enter text.										
2. PROJECT INFORMATION										
Is Quality Assurance Project Plan Available for this project: $\ \square$ Yes $\ \square$ No					If no, anticipated date of completion? mm/dd/year					
Name of Waterbody(s): Click here to enter text. Watershed: Click here to enter text.										
Sampling by (choose all that apply):	Choose an iten	n. Choose an ite		item.		Choose an item.		Choose an item.		
No. of Stations (Please Attach Site Map w/ Stations): Choose an item. Number of sampling events: Choose ar							ose an	item.		
Sampling Start Date:	Click here to e	here to enter a date.		Samplin	mpling End Date:		Click here to enter a date.			
Specify Parameters to be measured for this project: Click here to enter text.										
Is all or part of your study area located in an Environmental Justice (EJ) Area? 🗆 Yes 🗆 No 🗀 Not Sure										
Will all equipment be returned by December 1, 2015? ☐ Yes ☐ No										
3. EQUIPMENT REQUESTED										
YSI Multi-parameter Sonde (Temp, DO, pH, Conductivity, Salinity): Yes No										
Turbidity Tube:										
Handheld GPS: : ☐ Yes ☐ No										
Lab Equipment for Bacteriological Analysis										
Incubator:		Idexx Se	ealer: 🗆				UV Light w/Box:			
Infrared Thermometer:	frared Thermometer: Automated Pipette:						QuantiTray Frames:			
Will waste from bacteriological analysis be autoclaved/sterilized before disposal: Yes No										
Note: As the program expands, additional types of equipment may be added (i.e. Potable Air Quality Sensors, benthic macroinvertebrate sampling equipment, field kits for nutrients, etc.). For the most recent set of available equipment please visit the EPA Region 2 Citizen Science Equipment Loan Program at: Citizen Science Region 2 US EPA										

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4. USES OF DATA									
Will your group upload data or provide in a format that can be uploaded to STORET/WQX?: ☐ Yes ☐ No ☐ Not Sure									
Has your group partnered with a State or Municipality? ☐ Yes ☐ N	Comments?: Click here to enter text.	Comments?: Click here to enter text.							
If yes, name of State or Municipality: Click here to enter text.	Contact Name and Phone Number: Click	Contact Name and Phone Number: Click here to enter text.							
Please describe uses of your data and how information will be distributed and used: Click here to enter text.									
Will a report or data summary be available from this project? ☐ Yes ☐ No ☐ Not Sure									
5. GENERAL COMMENTS									
Please provide any additional comments that you may have here: Click here to enter text.									
6. EQUIPMENT LOAN CRITIERIA AND PROVISIONS (CHECK ALL THAT APPLY)									
☐ QAPP in Place Before Start of Project									
Data report/summary available within 6 months of completion of project									
☐ All or part of study area within an Environmental Justice Area									
☐ Collaboration with a State or Local Government with specific uses of the data identified ☐ Equipment and/or data to be used for Community Outreach or Education									
Equipment analor data to be used for Community Outreach or Education Equipment will be returned on time (December 15) and maintained in good working condition									
7. SIGNATURES									
I verify that all information on this application is completed and accurate and assume all responsibility for the return of the equipment clean and in working order.									
Applicant Signature:	Print/Type Name:	Date:							
Director, DESA, EPA Region 2 Signature:	Print/Type Name:	Date:							
EPA Equipment Manager Signature:	Print/Type Name:	Date:							